

# NGVAMERICA

and

## Clean Cities Coordinators

Working Together to Make the Most of Current Opportunities

*Jeff Clarke*

*NGVAmerica*

**Northeast and Mid-Atlantic Regions Clean Cities Coordinator Peer Exchange**

June 28, 2007

# Main Messages To Take Away Today

- Light-, medium- and heavy-duty NGVs ARE available
- New tax credits improve NGVs' payback and life-cycle cost advantages
- Multiple station development and O&O options exist
- NGVAmerica has enhanced its CCC support – TAKE ADVANTAGE

# Natural Gas Powered Engines and Vehicles

- American Honda –Civic GX
- BAF Technologies (Ford)
  - 4.6L (Crown Vic/Gr. Marquis/Town Car)
  - 5.4L (E350 passenger and cargo vans)
  - 6.8L (E-450 cutaway)
- Baytech Corporation (GM)
  - 6.0L L/M/HD (Pick-ups, vans, cutaways, W3500 CF, Isuzu NPR, Workhorse P)
  - 8.1L (HD pick-ups, C4500/-8500 (Topkick and Kodiak); W4500, NPR HD, Workhorse)
- Cummins Westport
  - 5.9L “B Gas Plus” – 195-230hp
  - 8.9L “ISL-G” – 250-320hp (replacing 8.3L “C” + 8.9L “L”)
- Emission Solutions Inc.
  - 7.6L Phoenix NG – 175-265hp (re-power for Int’l DT466 trucks)
- John Deere
  - 8.1L – 250-280hp (‘til 12/07)
- Westport Innovations Inc
  - 15L “ISX-Gas” – 400/450hp

## Light-Duty NGV Availability American Honda Civic GX



(...more from Honda a bit later in agenda)

## Light-Duty NGV Availability

# Impact of EPA Regulatory Changes\OBD II Requirements for Retrofit-Conversion SVMs

- 1994: EPA finalizes cert requirements for CNG
  - converters treated as SVM and given alternative option - Memo 1A
- 1997: EPA revises Memo 1A
  - Phases-in tighter requirements for aftermarket industry due to concern about emissions
  - Option 3 now becomes the rule for several years
  - Dozens of “kit manufacturers” leave market
- 2002: Option 3 expires
  - SVMs must go through certification; costly, technically difficult
  - Some certification requirements waived but most apply; some allowances provide w/ respect to OBD requirements
  - Only 4-5 SVMs have tech + financial resources to remain
- 2006: OBD II goes into effect for LDVs
  - Two SVMs able to fully meet LDV OBDII (Baytech, BAF)

# Baytech Corporation

- Sept '06: Rec'd MY2006/2007 CNG Certification from CARB (OBDII compliant)
  - In 2006 and beyond, alt fuel LDVs must to comply with OBDII

LDV in CARB states = <14,000 lb. GVWR

LDV for EPA = <8500 lb. GVWR

- Oct/Nov '06: Rec'd EPA/CARB certs for MY2006/2007:
  - 6.0L GM (light-duty, medium duty):
  - 6.0L GM (heavy-duty)
  - 8.1L (heavy-duty)

# Baytech Corporation

## 2007 California LDV/MDV Line-up

(& Northeast States with CARB standards)

- **CNG (dedicated only) - CARB SULEV/FED ILEV**
  - 6.0L G1500/2500/3500 Express/Savana Van
  - 6.0L Classic C1500HD/2500HD/3500 Sierra/Silverado
  - 6.0L Classic 2500HD/3500 Cab and Chassis
  - 6.0L W3500, Isuzu NPR
  - 6.0L Workhorse Chassis (less than 14K lbs GVWR)
  - 6.0L Van Cutaway (less than 14K lbs GVWR)

# Baytech Corporation

## 2007 California HDV Line-up

(& Northeast States with CARB standards)

- **CNG and Propane (both dedicated and dual-fuel)**

6.0L W4500, Isuzu NPR HD

6.0L Workhorse Chassis (over 14K lbs GVWR)

6.0L Van Cutaway (over 14K lbs GVWR)

8.1L C4500/5500

8.1L C6500/7500/8500

8.1L Workhorse Chassis

\* Additional Models are available for Federal (EPA Cert.) States



# Baytech Corporation

## 2007 6.0L GM LDV, MDV Examples

Chevy or GMC 1500/2500 Series  
Express/Savana Van



Chevy or GMC 3500 Series  
Express/Savana Van



Chevy or GMC 3500 Series  
Cab & Chassis



Chevy or GMC 3500 Series  
Van Cutaway



Chevy or GMC 1500, 2500HD  
Series Silverado/Sierra



Chevy or GMC 2500HD,  
3500 Series Cab & Chassis



Isuzu NPR  
(shown w Tymo 210 sweeper)



Workhorse Chassis step-van  
(<14,000#)

# Baytech Corporation

## 2007 6.0L + 8.1L GM HDV Examples



Isuzu NPR HD w 6.0L or 8.1L  
GM engine



Workhorse P Chassis 6.0L or  
8.1L GM engine



GMC 6500/7500/8500 Series  
with 8.1L GM engine



GMC 4500/5500 Series  
with 8.1L GM engine

Ordering Information – contact Baytech for location of dealerships they work with or upfitters they use.

# BAF Technologies

- MY2006/2007 CARB SULEV cert for 4.6L Ford/Lincoln/Mercury sedan group:
  - Crown Victoria, Lincoln Town Car, Mercury Grand Marquis



- MY2006 + 2007 EPA cert for 5.4L E350 extended passenger/cargo van (9600# GVWR)

- MY2006 + 2007 EPA/CARB cert for 6.8L E450 cutaway:
  - 2006 used Teleflex GFI system
  - 2007 uses BAF Cal-Comp system



# BAF Technologies

## Upfit Locations



Headquarters  
Dallas, Texas



Fresno, California



Rome New York



Fontana, California

- Vehicle sales thru dealers; contact dealerships; BAF will work with/assist dealer
- Vehicle service thru BAF, dealer or local service shop
- Warranty: 3 years or 36,000 miles on major components (Ford, GM)  
(OEM component replacement for failures due to gaseous fuel on a properly maintained engine for the period remaining on the OEM warranty)



# Update: John Deere Power Systems

- In Dec 2006, JDPS announced plans to discontinue production of their remaining 8.1L engine after MY2007 production runs
  - Corporate decision: devote engineering resources to meeting 2010 HD engine emissions requirements of its off-road lines (farm, construction, etc)
- JDPS is OEM supplier to Blue Bird and Thomas Bus for their Type D school buses, Crane Carrier for LET refuse
  - Taking orders until manufacturing capacity is booked – check with dealer on availability
  - Committed to provide parts and warranty service for existing units



# Other Engines and Vehicles

- Westport Innovations ISX-G
  - 15L (HPDI) engine, 400-450 HP; Diesel pilot fuel, mostly NG; CARB certification @ .8NOx
- Emissions Solutions Inc
  - 7.6L Phoenix (SING)
  - Based on Intl's DT466 platform
- Cummins Westport Inc
  - 5.9L B Gas+, ISLG 9.0L (SING)
  - Primary to many OEMs in refuse, yard hostler, transit sectors



Kenworth T800



International 4400 Series



International 8100 Series

# Light-Duty NGV Availability American Honda Civic GX



Barry Carr, Honda Motor Corporation

# Emission Solutions Inc.



Jim Moore, President



# Cummins Westport Inc.



Bill Boyce, Regional Sales Manager

## Summary

# Natural Gas Powered Engines and Vehicles

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# Discussion / Q&A Period on NGV Availability

# Federal Tax Credits and How to Take Advantage of Them

- Three-Legged Stool
  - Fuel Station Tax Credits (little impact)
  - Vehicle Tax Credits (good impact)
  - Motor Fuels Excise Tax Credits (most impact)

# Fuel Station Tax Credit

- Equal to 30% of cost of alt refueling equipment placed in service that year, up to \$30,000
  - Incentive may be taken on multiple stations per company
  - Up to \$1,000 for home refueling appliances
  - Existing \$100,000 tax deduction for refueling property repealed
- Credit may be passed from buyer to seller if buyer is tax exempt entity – installer/seller must disclose credit value
- Credit is effective on equipment placed in service after December 31, 2005 and expires on December 31, 2009

# Vehicle Purchase Tax Credit

- A *income* tax credit to the *buyer* of a new, dedicated alternative fuel vehicle:
  - 50 percent of the incremental cost of the vehicle; incremental cost cap based on four GVW ranges
  - Additional 30 percent if meets tighter emission standards.
  - Tax credit transferable to seller if buyer is tax exempt entity and seller discloses the value of credit

(continued)

# Vehicle Purchase Tax Credit

- Credits range from \$2,500 to \$32,000 depending on GVWR
  - \$2,500-\$4,000 for vehicles under 8,500 lbs.
  - \$5,000-\$8,000 for vehicles between 8,500-14,000 lbs.
  - \$12,500-\$20,000 for vehicles between 14,000-26,000 lbs.
  - \$20,000-\$32,000 for vehicles over 26,000 lbs.
- Credit is effective for vehicles placed in service after December 31, 2005 and expires on December 31, 2010
- “Retrofits/Conversions” qualify, if retrofit/repower was done after 12/31/05 – to claim credit must be first person to use vehicle as an alternative fuel vehicle

# Motor Fuels Excise Tax Credit

- The Volumetric *Excise* Tax Credit for Alternative Fuels (VEETC)
  - JOBS Act of 2004 created VEETC for ethanol and biodiesel
  - SAFETY-LU Act of 2005 made CNG, LNG, LPG, hydrogen and other non-petroleum fuels eligible when those fuels are used in motor vehicles
- A 50 cent motor fuels excise tax credit is paid to the seller:
  - Per GGE of CNG or per liquid gallon of LNG
- The credit is applied/paid to eligible recipients without regard to the amount of excise tax paid, if any (tax exempts)

(continued)



# Motor Fuels Excise Tax Credit

- Provision also bumps up excise tax rate on CNG and LNG
  - CNG excise tax increases from \$.0607/GGE to \$.183/GGE
  - LNG excise tax increases from \$.119/LNG gal to \$.243/LNG gal
- Credit began October 1, 2006, Expires on September 30, 2009
- Tax credit may be taken as excise tax credit, income tax credit, or direct payment, depending on circumstances

(continued)

# How to Apply For Motor Fuels Excise Tax Credit

- All entities that want to recover credit must complete IRS Form 637, “Application for Registration” (mark “AL” - alternative fueler)
- Quarterly (or more often if excise tax liability exceeds \$2500), file IRS Form 720, “Quarterly Federal Excise Tax Return) of you have liability. Apply credit toward excise tax owed. How you recover “overage/rebate” depends on tax status:
  - A. Taxable Entities: File IRS Form 4136 at end of year to recover credits *over and above* those applied against quarterly tax liability.
  - B. Tax-Exempt Entities: File IRS Form 8849 and addendum form Schedule 6 as often during year as desired as long as there is at least one transaction... skip step 2 if no liability

# Options To Explore For Tax Exempts to Capture Tax Credit Value

- Tax-exempt entity has “useless” credit – wants to glean value
  - Ex A. Passes back to dealer, who must state in writing what credit is available. Next step: Define value to be passed back to customer in form of price reduction (dealer may keep all or portion for time-value of money, admin paperwork - negotiated).
  - Ex B. Dealer/supplier has little or no tax liability – doesn’t want it and will not cut price to tax exempt. Enter lease/finance entity, who buys from dealer, takes full credit and reduces basis of price in the *capital lease* structured for the customer. Capital lease is common form of “loan” for tax-exempt entities who are often barred from entering into loan terms that go beyond approved budget year. Financing/leasing through municipal lenders is common for cash-strapped tax-exempts.

# Identifying the Best Targets NGV Efforts

- Economics
  - High Fuel Use, Central Fuel
  - Transit, Refuse, Airport Shuttles and Taxis, Utilities, “Short-Haul/Delivery” Ops (Food/Beverage/Snack, Linens, Pkg. Delivery/Courier Services, Port/Rail, Newspapers)
- High Visibility
  - School Districts, Local/State Government, Utilities



# NGV Simple Payback and Life-Cycle Cost

- Delivery Fleets
- Airport Shuttle and Taxi Fleets
- Refuse Fleets  
(Russ Barnett to speak about  
Smithtown experience a bit later)

# Delivery Fleet Characteristics Favorable to Use of NGVs

- Fuel cost + labor productivity are key business cost drivers
- Centrally fueled or “anchor location” fueling
- Operate on “predictable” repetitive routes within metro area
- Skilled mechanics maintain fleet
- High visibility – vehicles “communicate” image to the public
- Anti-idling measures create challenges for diesel in cold climates; NGVs are not subject to cold weather problems

# Cargo Van



- Sample Applications
  - Newspaper, Package/Courier Service
- GVW-9600+ lbs.
  - Ford E-350/Chevy 3500 Series extended vans
- MPG: 10/18 City/Hwy
- Miles/day: 75-175
- Fuel Use: 10-15 gge/day; 2600-3000gge/yr
- CNG Premium: \$14-16,000 (before fed tax credit)
- Fed Tax Credit: \$8000
- Simple Payback: 1.7 – 3.3 years  
(fueling at own station: 1.25-1.50 savings/gge)
- Life-cycle cost advantage: \$3,570 - \$13,750



# Step Van

- Sample Applications
  - Package Svc, Bakery/Snack Food, Linen
- GVW-14,000+ lbs.
  - Workhorse P, Freightliner Custom
- MPG: 4.0 – 6.5
- Mileage: 50-80/day; 325-450/wk; 20K/yr
- Fuel Use: 15-20 gge/day; 4800 gge/yr
- CNG Premium: \$23-26,000 (before fed tax credit)
- Fed Tax Credit: \$20,000
- Simple Payback: 1 - 1.5 years  
(fueling at own station: \$1.25-1.50 saving/gge)
- Life-cycle cost savings: \$30,600 - \$63,000





# Class 7 Straight Truck or Daycab Tractor



- Sample Applications
  - Beverage (beer, soda, water, dairy), Restaurant provisions, Office Supply
- GVW - 26,000+ lbs.
  - Int'l 4000, 8100 Series, Freightliner M2
- MPG: 3.25 – 4.75
- Mileage: 45-80/day; 250-455/wk; 13-22K/yr
- Fuel Use: 14-25 gge/day; 5000-6800 gge/yr
- CNG Premium: \$48-52,000 (before fed tax credit)
- Fed Tax Credit: \$32,000
- Simple Payback: 2.75 – 4.2 years
- Life-cycle cost savings: \$34,800 - \$50,000

# Case Study: DyDee Diaper & Linen Services

- 14 CNG step vans @ 18gge/day;
  - Uses 255gge/day or 66,300gge/year
- Uses twinpack I-R 25hp compressor station
  - Has redundancy + 75% add'l capacity to grow
- His cost per CNG gge: \$1.484 (saves \$1.50/gge)
  - Gas Bill: \$1.036/gge
    - Commodity (cost of the gas):  $\$0.737/\text{therm} = \$0.9213/\text{gge}$  (124,800Btu/therm)
    - Local gas company service (fee to transport gas to his meter): \$.08/gge
    - State special assessments and local municipal use taxes: \$.035
  - Electric compression costs (estimated @ 1Kw/gge): \$.18/gge
  - “Sinking fund” to cover station maintenance & operations: \$.17/gge
  - Capital amortization of station equipment: \$.33/gge (based on \$220K /10 yrs)
  - State motor fuel excise tax: \$.085/gge
  - Net \$.317/gge federal tax credit (\$.183/gge excise tax less \$.50/gge credit)



# Airport Fleet Characteristics Favorable to Use of NGVs

- Fuel cost is key driver
- Some airport policies facilitate NGVs
  - Exclusive airport pick-up access or Lower access fees
  - Front of Line privileges
- Centrally fueled or “anchor location” fueling (airport)
- Operate in metro area; usually return to airport

# Passenger Van



- Sample Applications
  - Door-to-door shuttle, Hotel/parking Shuttles
- GVW-9600-10,000+ lbs.
  - Ford E-350 extended van / E450 cutaway
  - Chevy/GMC 3500 Cutaway Series
- MPG: 10/12 City/Hwy
- Miles/day: 75-125; 6-7 days/wk, 32-42K/yr
- Fuel Use: 9-12 gge/day; 2800-3400gge/yr
- CNG Premium: \$14-16,000 (before fed tax credit)
- Fed Tax Credit: \$8000 (<14000#)
- Simple Payback: 3.5 – 4.0 years  
(based on \$.40-.65/gge savings @ ind. station)
- Life-cycle cost advantage: \$1500 - \$2500  
(depending on use and mpd, cost differential)

# Taxicab/Limo Service



- GVW < 8500 lbs.
  - Ford Crown Vic/Lincoln Town Car
- MPG: 10/18 City/Hwy
- Miles/day: 125-200
- Fuel Use: 12-18 gge/day; 3400-5200gge/yr (depending on days per week)
- CNG Premium: \$10-12,000 (before fed credit)
- Fed Tax Credit: \$4000
- Simple Payback: 3.0 – 4.0 years
- Life-cycle cost advantage: \$1000 - \$2500

# Discussion of Tax Credits, Payback and LCC Analyses



# CNG Infrastructure, Station Development and Ownership-Operations Options

- No one right solution – multiple factors play into decision
  - Operational, Financial, Geographic
- Use of available infrastructure is best, but may not fit needs
  - Convenience, traffic access, liability concerns
- Options to explore:
  - Onsite private access only... may be right for customer but doesn't facilitate growth of “public” infrastructure (pros and cons)
  - Onsite with public access “outside the fence” and challenges
  - Anchor fleet at public access station but “stars must align”
  - O&O?; own and contract out operations; delegate entirely to independent fuel provider?

# CNG Infrastructure, Station Development and Ownership-Operations Options

- Clean Energy
- Trillium
- Discussion / Q&A



# Discussion of Station Development, O&O Options

Case Study of a Successful CNG Program Development and Implementation

# Smithtown, New York Refuse Hauler Program

Russ Barnett  
Town of Smithtown, NY

# NGV America Outreach-Education Programs and the Clean Cities Coalition Connection

Take the message to customers, policy-makers and clean-air/clean-vehicle advocate-allies:

- Educate them concerning EPACT and Transportation Act incentives for vehicles, stations and fuel
- Highlight successes and tips on program implementation
- Provide market development tools and analyses and/or direct to other available resources

# Outreach and Market Development Activities

Staff recommendations made for each niche segment

- Presentations, seminars, “webinars”
  - Trade exhibits (10 x 10s, “zones” and/or “co-ops”) and related functions
  - Advertorials, articles
  - Market analyses, other tools
- Underlying caveat: keep Clean Cities Coalitions and other advocate-allies involved and in the loop

# 2006 Presentations/Seminars/Workshops

- APTA Bus & Paratransit Conf: Anaheim, CA – May
- AAAE Airport Environmental Conf.: Columbus, OH – May
- AAPA Harbors, Navigation & Environment. Sem: Vancouver, BC – June
- Greater L.I. CCC School Trans. Seminar, Long Beach City, NY – June
- AAMVA NE Region Conf.: Hauppauge, NY – July
- School Trans News (STN) Conference/Expo: Reno – July
- CGCU Heavy-Duty Vehicle Workshop: Indianapolis – August
- ASBO Int'l Conference/Expo: Pittsburgh – October
- CA Transit Association Conference/Expo: Long Beach – November
- Conn./Rhode Island Clean Cities Annual Mtg,- Mohegan Sun, CT – Nov

# 2007 Presentations/Seminars/Webinars

- Louisiana Clean Cities Annual Mtg, New Orleans, LA – Jan
- Virginia/North Carolina NAFA Mtg, Richmond, VA – Jan 10
- Faster Freight-Cleaner Air Conference, Long Beach, CA – Feb 27
- AFVi Alt Fuels & Vehicles Conference, Anaheim, CA Apr 1-4
- Mobilizing North Carolina Conference: Greensboro, NC – Apr 18
- APTA Bus & Para-Transit Conference: Nashville, TN - May 6-9
- *APWA Annual Congress/Expo: San Antonio, TX – Sep 9-12*
- Clean Cities Coordinators Nat'l Peer Exchange: KY – Sep 25-26
- Alt Wheels Conference/Expo – Boston, MA – Sept 28-Oct 1
- BUSCON – Chicago, IL - Oct 2-3
- SWANA WasteCon Seminar: Reno, NV- Oct 14
- Greater Long Island CC Annual Conf./Expo – Melville, NY – Oct 24
- *AAAE Ground Trans. & Landside Mgt Workshop: Balto, MD – Nov 6-7*
- Ohio Clean Cities Forum/Expo – Columbus, OH - Nov 8

# Tradeshow Exhibits, Zones & Co-ops

(NGV America-funded or co-sponsored)





# 2006 Tradeshow Exhibits/Zones/Pavilions

- Clean Heavy-Duty Vehicle Conf: San Diego, CA (2/22-24)
- WasteExpo: Las Vegas, NV (4/5-7)
- APTA Bus & Paratransit Conference: Anaheim, CA (4/30-5/2)
- AFVi Clean Cities Congress: Phoenix, AZ (5/7-10)
- STN Expo: Reno, NV (7/22-26)
- League of CA Cities Annual Conf./Expo: San Diego, CA (9/7-8)
- Assoc. of School Business Officials Conf./Expo: Pitts., PA (10/13-16)
- CA Transit Assoc. Annual Conf./Expo: Long Beach, CA (11/7-10)
- Clean Cities Joint Regional Coord. Peer Exchange: Ind., IN (11/1-4)
- AAAE Airport Ground Transportation Workshop: Phx, AZ (11/7-8)
- NGV2006: Cairo, Egypt (11/7-9)

# 2007 Trade Show Exhibits/Zones/Pavilions

- AFVi Alt Fuels & Vehicle Technologies Conf.: Anaheim, CA (4/1-4)
- NAFA Annual Fleet Mgt Institute/Expo: Houston, TX (5/6-7)
- WasteExpo: Las Vegas, NV (5/7-8)
- APTA Bus & Para-transit Conf.: Nashville, TN (5/6-10)
- AAAE Annual Conf. & Expo: Washington, DC (6/10-13)
- School Transportation News Conf./Expo – Reno, NV (7/31)
- League of CA Cities Annual Conf./Expo: Sacramento, CA (9/6-7)
- APWA Annual Congress & Expo: San Antonio, TX (9/9-12)
- Alt Wheels Conf/Expo – Boston, MA (9/28-10/1)
- BUSCON – Chicago, IL (10/1-3)
- SWANA WasteCon Conference/Expo: Reno, NV (10/14-17)
- Nat'l League of Cities Annual Congress: New Orleans, LA (11/14-17)
- Regional Clean Cities Annual Conference/Event Support

# 2006 Advertorials

## School Transportation News

- Circulation: 24,000
- 16-pg; Jan 06 issue.
- 11 member advertisers supported



## METRO

- Circulation: 23,000
- 16-pg; Oct 06 issue.
- 12 member advertisers supported



## Waste Age

- Circulation: 40,000
- 16-pg; Oct 06 issue.
- 15 member advertisers supported



2007: Advertorial planned for American City & County (10/07)

# Advertorial Pricing Structure

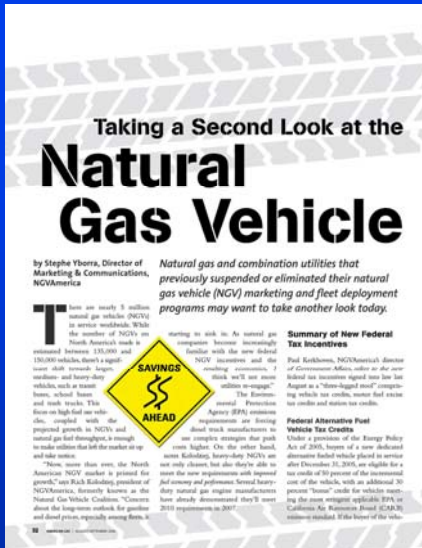
(first 10 free to CCCs, when available)

- 1-74 copies.....\$1.75 each
- 75-149 copies.....\$1.50 each
- 150-224 copies...\$1.35 each
- 225-499copies....\$1.15 each
- 500+ copies.....\$1.00 each

Price includes shipping by ground; courier extra

# Press Articles in Trade & Consumer Media

- NGVAmerica works with magazine and newspaper editors to write and place articles and/or provide story ideas and contacts for their own story development.



- End-user trade magazines
- Policymaker magazines
- Alt Fuel magazines
- General Business media
- Mass media

(Airports, Local Gov't, Refuse, Transit, School District)

Natural gas-powered parking shuttles are a high-visibility way for airports to reduce emissions while publicly demonstrating commitment to environmental stewardship.

investment decisions on "around the bend" promises of "clean diesel" proponents, proactive local government fleet managers are making the transition to NGVs now and, in the process, familiarizing themselves with gaseous-fuel engines, vehicle and fueling technologies.

Many cities promote use of CNG- and LNG-powered refuse vehicles through their favorable clean vehicle procurement and/or contracting policies.



Schools have the option of selecting OEM units from Thomas Built or Blue Bird or having a gaseous-fuel systems integrator install LPG- or CNG-certified retrofits, as

**NGVAMERICA**  
Natural Gas Vehicles for America



# Analyses, Brochures and Other Tools

- Update current items:
  - *Analysis of Vehicle, Fuel Station and Motor Fuels Excise Tax Incentives on School Bus Purchase and Operating Costs*
  - *Available Natural Gas Vehicles & Engines*
  - “*NGV Market Profiles*” series of one-page promotional fliers
  - *Federal Credits for the Purchase of NGVs: FAQs*
  - *Fact Sheet* series on web site
- Create new:
  - *Analysis of Vehicle, Fuel Station and Motor Fuels Excise Tax Incentives on Refuse Truck Purchase and Operating Costs*
  - *NGV Market Profiles*” - Short Haul/Delivery, Utilities



# Member /Advocate-Ally Education

- Coordinate with AFVi, NAFTC, ATTE and US DOE Clean Cities program to participate in their training/education series
- Initiate quarterly NGVAmerica e-newsletter and/or webinar focusing on Tips to Effective NGV Advocacy
  - Cross-discipline briefing for members, non-member utility reps, Clean Cities Coordinators and other advocate-allies
  - Utilize skills resources of “Guest Editors” and “Guest Presenters”
  - Possible Topics: Prospect List Development, Grant Writing, Generating Media Coverage, Enhancing Your Stakeholder Network, Niche-Specific Sales-Marketing Presentations (e.g. Delivery Fleets)

# Thank You For Your Time

## Questions?

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